



APS NEWSLETTER | NOVEMBER 2024



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES



PRESERVATION

The latest news from Missouri SHPO's
Architectural Preservation Services Team

Matters



Message from the Editor: SHPO wishes to thank our National Park Service colleagues Liz Petrella, Vincent Lake, Brian Goeken and Elizabeth Tune for their visit to Missouri Oct. 7-11. We also wish to thank every one of you who hosted or participated in site visits, meet-and-greet events, and the Listening Session to help our colleagues at NPS gain a deeper understanding of historic preservation in Missouri and some of its large cities and small towns. We hope to welcome NPS back again in the future!

MO-Pres Annual Conference Focuses Attention on the Ozarks

September ended with a bang as Missouri's preservation community gathered for the annual meeting of the Missouri Preservation Alliance, Missouri's only statewide

nonprofit organization dedicated to historic preservation. This year's conference was held at Echo Bluff State Park, located in the heart of south central Missouri, between Salem and Eminence. Tucked away in the hills above the Upper Current River, Echo Bluff State Park is close to the Current River State Park and lies within the Ozark National Scenic Riverway.

More than 20 conference sessions over three days included talks on a variety of topics from technical information to historical studies and preservation "how-to" advice from experienced preservationists. Bradley Wolf, the city historic preservation officer for Kansas City, Missouri, described how Kansas City successfully prevented "speculative demolition" of three historic buildings that came under threat in response to the city's streetcar overlay. His advice to cities in similar situations is to locally designate all NR-eligible properties that are potentially under threat; create new local districts or expand existing local districts in the area(s) under threat; enact a demolition delay ordinance; and publish NR-eligible properties in a GIS overlay.



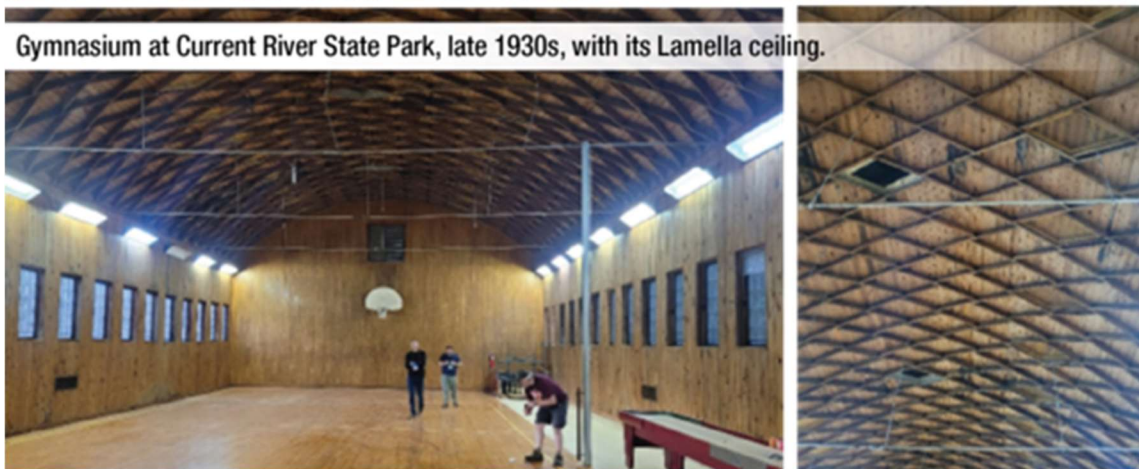
For an in-depth look at how numerous historic preservation tools were marshalled in the preservation of Alley Spring Roller Mill, four members of the team who worked toward the mill's preservation talked about preparing a Cultural Landscape Report (CLR), a Historic Structure Report (HSR) and a National Register Nomination for the Alley Spring Roller Mill Historic District. The CLR and HSR provided park management with an understanding of the evolution, historical significance and

existing conditions of buildings within the Alley Spring Roller Mill park (part of the Ozark National Scenic Riverways), fostering informed and thoughtful management and preservation of the property. The HSR included recommendations for immediate maintenance and future treatment of the cultural landscape and historic structures, including ways to address site and building accessibility and life-safety issues. Research for these two reports supported the development of a Determination of Eligibility and National Register nomination for the district. Angie Gaebler and Claire Ashbrook of STRATA Architecture + Preservation, Stephanie Redding of the Quinn Evans design firm, and Deb Sheals of Building Preservation shared their experiences and insights working on this project, both in a conference session and on a site tour.

Joseph Carpenter and Ryan Norbo Honerkamp gave a presentation on “Historic Building Structural Systems No Longer Used in Current Construction.” These included widely used systems that preservationists run into all the time, like unreinforced load bearing masonry, cast-iron brick wall anchors, and limestone rubble wall foundations. Carpenter and Honerkamp also talked about some rarer structural systems like Lamella, which (coincidentally?) could be seen firsthand at the historic gymnasium found at the Current River State Park. Lamella, a compression barrel-vaulted wood segmental structure, was invented in Germany in 1908 to cover long spans with wood at a time when steel was in short supply. Gustel R. Kiewitt, the inventor, immigrated to St. Louis from Germany in 1923; three years later he partnered with Edward Faust, the son in-law of Adolphus Busch, and the pair started the Missouri Lamella Roof Company in 1926. Because of this partnership, Missouri has a higher concentration of this unique building type than anywhere else in the country.



Joseph Carpenter explains the Lamella roof system.



Gymnasium at Current River State Park, late 1930s, with its Lamella ceiling.

Several attendees participated in a steel window workshop led by Marie Taylor of True North Preservation (and a former SHPO staff member!) and Jeremy Spiegel of Spiegel Restoration. SHPO staff were also in abundance at the conference, offering five sessions for Continuing Education credits; one of these sessions was presented in conjunction with the Department of Economic Development staff Cathy Wade, Jennifer Kingsbury and Angel Moscato.



Top Left and Right: steel window workshop.



(From left to right) Dawn Scott, Aaron Schmidt, Ethan Starr, April Scott, Allyson Ingli, and Elizabeth Hornbeck represented SHPO at the conference along with Amy Rubingh and Christopher Stone (not pictured).

Another highlight of the annual conference were two architectural tours, both of which spotlighted man-made and natural features of the region. The Wednesday afternoon tour, “Architecture & History of the Upper Current River,” was led by Dr. Ben Timson with guest speakers Janet Fossey, Don Love, Jo Schaper and Judy Stewart. With the help of a very skilled bus driver, conference attendees were led on winding roads and dirt paths to tour the Shannondale Community House, built in 1933 by the local community; the Mount Zion Church in Akers, built in 1948; the Devil’s Well, a very large sinkhole with a vast underground lake; and Welch Spring, which feeds into the Current River. A National Park Service guide led the group to

the Welch Spring Cave, where in years past there was once a mill and later a hospital, both now vanished.



On Friday, despite a constant drizzle, the second tour took conference attendees to see Alley Spring Roller Mill, which sits at the mouth of Alley Spring, one of the state's largest springs. The National Park Service guide said it is the most photographed mill in the world. Built in 1894, the iconic red wooden structure is surely one of Missouri's most picturesque buildings. But it wasn't always red; it was initially painted white. It acquired its red color sometime between 1925 and 1933 when it was part of Missouri State Parks and no longer in use as a mill. In 1970 it became part of the National Park system with the creation of the Ozark National Scenic Riverways.

Finally, to Riley Price, executive director of Missouri Preservation Alliance, we say "job well done!" Planning and coordinating the meeting with a staff of one person – Riley herself – is a monumental feat. Congratulations to Riley and the Board of Missouri Preservation on another successful annual conference.

Ozark Rubblestone Masonry

The Mo-Pres conference and specifically the conference tours provided an opportunity to study Ozark rock masonry up-close. The technique is known by a variety of names: Ozark rock masonry, Ozark rubblestone masonry or Ozark cobblestone masonry; and a building using this technique is sometimes referred to as an “Ozark rock job.” A building known as a “giraffe” exhibits a specific variety of Ozark rock masonry that uses split slab sandstone with flat surfaces. Ozark rock masonry can be observed throughout Missouri, but is especially common in the Ozarks region, and occurs in greater concentration the further south you go.

Architectural historian Deb Sheals has called Ozark rock masonry “the most distinctive genre of 20th century vernacular architecture found in Missouri.” It was especially popular from the 1910s - 1950s, and is still employed today.

Traditionally, field stones were set into either portland cement (which was relatively expensive) or into lime mortar (which was less expensive and easy to make from limestone and sand) to create a load-bearing wall with a decorative facing of local rocks of varying sizes and colors. After the 1930s, the rocks and their cement matrix were often set onto frame buildings, but load-bearing concrete construction still persisted.

The most in-depth study of this building technology was done by Sheals in 2004-5 for the City of Springfield, and was funded in part by a Historic Preservation Fund grant administered by the Missouri State Historic Preservation Office. Sheals’ study was published as an amendment to the 1999 *Historic and Architectural Resources of Springfield, Missouri*, Multiple Property Documentation Form (MPDF), which can be found on the SHPO website. (See “*Did You Know?*” below for more information about *National Register listings*.) While Sheals studied architectural examples in the City of Springfield, her findings are broadly applicable to Ozark rock masonry throughout the Ozark region.

One appeal of Ozark rock masonry was and still is its ease and affordability. This technology was almost always the work of untrained designers, and it was possible to learn the basics of working with rock from written sources or workshops. Sheals found that the University of Missouri Extension Service held workshops during the

1920s and 1930s to show interested parties how to construct fieldstone buildings. A 1934 article in *Missouri Magazine* also provided detailed instructions on how to create a rock building.

Ozark rock masonry uses available local rocks, which in Shannon County is about 80 to 85% chert of various types and colors ranging from white to yellow to orange. Some chert is a microcrystalline quartz known as druzy quartz; some chert contains fossils from when this area was under a shallow sea some 470 million years ago. Other local rocks found in Ozark rock masonry include Roubidoux sandstone and brown iron ore (limonite).

Ozark rock masonry has been used for many building types including religious, residential, commercial, civic and public buildings. In Shannon County, the two main examples we explored during the Missouri Preservation Annual Meeting were religious structures: the Shannondale Community House, built in 1933, and the Mount Zion Church in Akers, which was completed in 1948.



Numerous other buildings and structures on the Shannondale Community House grounds were also built with Ozark rock masonry.



When the Shannondale Community House was being built, everyone in the community contributed local rocks from hillsides and riverbanks; even children could bring small stones, which were artistically incorporated into the overall ornamental design. The Shannondale Community House is unique because local families were also asked to contribute rocks they had collected on their vacations, so the building's walls incorporate amethyst, petrified wood and other rocks not native to Shannon County.



Mount Zion Church in Akers was included on Missouri Preservation's 2023 "Places in Peril" list. It has been owned by the National Park Service for the past 50 years and is one of the few church buildings remaining within the Ozark National Scenic Riverways along the Current River. It was listed on the National Register of Historic Places in 1993.

A comparison between these two Ozark rock masonry buildings shows the variety of techniques that could be employed within the overall technology. The Mount Zion Church has "ribbon mortar" between the rocks, which is formed using modified copper pipe to tool a rounded profile in the wet cement; geologist Jo

Schaper refers to this improvisational technique as “Ozark engineering at its finest.”



“Giraffes”: Another variety of Ozark rock masonry uses split slab construction. Roubidoux sandstone naturally splits into 2- to 4-inch layers, creating lighter and thinner plates of rock. While rough fieldstones tended to be thicker, smaller, and heavier, split slab sandstone could cover a larger area; slabs could be more than 18 inches across. A pavilion at Alley Spring campground, which was built by the Civilian Conservation Corps (CCC) in 1934, shows both fieldstone construction and split slab construction as the exterior and interior faces of the same corner wall, as shown in these photos:



Exterior (left) and interior (right) of an Ozark rock masonry support wall of the Alley Pavilion at the NPS Alley Spring campground. The photo on the right shows typical "giraffe" construction with flat sandstone slabs.

Note: Jo Schaper points out that an example of "giraffe" masonry can be found on the National Park Service's Route 66 website; see <https://www.nps.gov/places/rock-fountain-court.htm>.

Sources:

Ruth Keenoy, "Ozark Stone Architecture on Route 66" (5/6/2021). Missouri Preservation website, <https://preservemo.org/ozark-stone-architecture-on-route-66/> . Accessed 10/1/2024.

Jo Schaper, "Building Giraffes Along Route 66," *Show Me Route 66 Magazine* (Volume 23, no. 2) 2013: 11-15. First published in *River Hills Traveler*.

Deb Sheals, "Ozark Rock Masonry in Springfield [MO], ca. 1910-1955," 2006 amendment to *Historic and Architectural Resources of Springfield, Missouri*, 1999 MPDF (National Register nomination).

Missouri Preservation Alliance

The Missouri Alliance for Historic Preservation (Missouri Preservation) is Missouri's only statewide nonprofit organization dedicated to promoting, supporting and coordinating historic preservation activities throughout the state. Founded in 1976 as the Missouri Heritage Trust, Missouri Preservation has evolved into a respected grassroots network of individuals, organizations and preservation commissions. It is governed by a volunteer Board of Directors representing urban, rural and suburban interests, as well as a variety of professions from architects and tax credit specialists to building historians and engineers. The organization has three missions: to advocate for historic preservation, to educate preservationists and the public and to assist communities and individuals to find both technical assistance and funding opportunities in support of preservation.

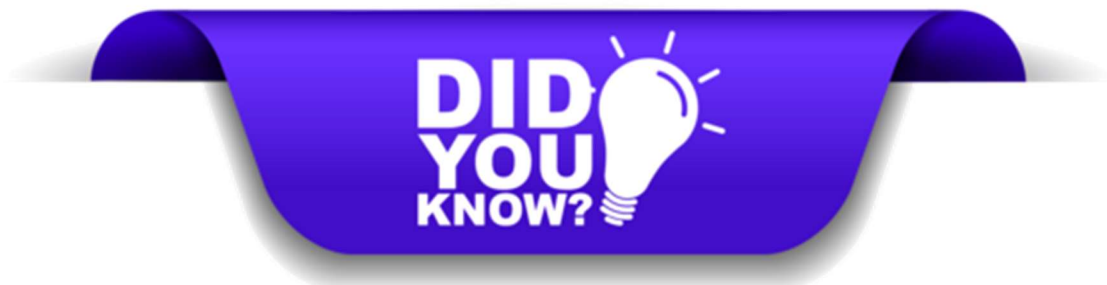
The annual conference is the organization's most important venue for educating preservationists, and it also provides a place for networking and connection. During the past 10 years, the conference has been held in Excelsior Springs, Cape Girardeau, Hannibal, Sedalia, St. Joseph, Jefferson City, Joplin and Eminence, bringing preservation to all areas of the state.

The website of Missouri Preservation (www.preservemo.org) offers invaluable resources for preservation consultants, building owners, developers and architects, so anyone seeking information related to historic preservation should always consult the Missouri Preservation website first. The organization maintains lists of consultants and building professionals and tradespeople.

Missouri Preservation advocates for preservation throughout the State of Missouri with their annual Places in Peril list. The Places in Peril program, which began in 2000, is meant to bring awareness to endangered places, the groups that support them and their goals, such as fundraising campaigns and volunteer needs. All properties considered for the list, which is decided upon by a volunteer group of preservation professionals and enthusiasts, are nominated by concerned individuals. Buildings may be threatened by deterioration, lack of maintenance, insufficient funds, imminent demolition and/or inappropriate development. This form of advocacy works by raising public awareness of these buildings and what we can do to help save them. By publicizing places such as these, Missouri Preservation hopes to build support towards each property's eventual

preservation. As Missouri Preservation points out, once the historic resource is gone, it's gone forever.

Success stories are also recognized in Missouri Preservation's annual Honor Awards, with which the organization identifies buildings that have been successfully saved and rehabilitated. There are also awards for the work of individual preservationists, and for authors whose books focus on historic architecture in Missouri. This vital non-profit organization is funded primarily through individual memberships, and you can become a member via their website.



The National Register of Historic Places, which was established in 1966, is considered the “honor roll” of historic buildings, districts, sites, structures and objects of importance at the national, state or local level throughout the United States. While places such as cemeteries and battlefields may be placed on the National Register, only *buildings* listed on the National Register are eligible to receive Historic Tax Credits for Rehabilitation. For buildings, there are two types of NR listings, which are referred to as NR nominations: individually listed buildings and historic districts. Historic districts, which may include as few as two buildings or may have thousands of resources, will designate each building in the district as either “contributing” or “noncontributing.” Within a historic district, only “contributing” resources are eligible to receive Historic Tax Credits (though noncontributing resources may be reevaluated and found to be “contributing”). There are two kinds of Historic Districts as well: “NR Historic Districts” and “Certified Local Districts” (CLDs). CLDs are NOT the same thing as local districts that have been designated as such by a local municipality. CLDs have been placed

on the National Register by the National Park Service, and properties within them may be eligible for Historic Tax Credits.

SHPO's National Register and Survey Section works with all NR nominations in the State of Missouri to make certain the nominations include all the information necessary for a successful submission to NPS. The Missouri Advisory Council on Historic Preservation (MOACHP) state review board meets quarterly to recommend submissions before they can be forwarded to NPS.

The SHPO website (<https://mostateparks.com/page/84371/state-historic-preservation-office>) has all the information you might need to look up National Register nominations, historic districts, the requirements and due dates for submitting a nomination, and details about the MOACHP state review board.

- National Register Submissions Standards and Deadlines:
<https://mostateparks.com/page/85656/nominations-national-register>
- Missouri Advisory Council on Historic Preservation:
<https://dnr.mo.gov/commissions-boards-council-historic-preservation>

On our website SHPO maintains two primary resources to help property owners and the public determine if a property is NR listed.

1. Interactive GIS Map

First, SHPO maintains a GIS map that you may enter the property address; the map will show the property within an area that is color-coded: green for Historic Districts, beige for areas that have been surveyed but have not been listed as Historic Districts. Green circles identify NR-listed resources. A text box will pop up when you click on a property, a survey area or a historic district, providing more details about its NR status. You may reach this map from the SHPO website either of two ways:

A. Select **Maps and Records from the menu on the right and click on the text that says “**National Register Sites and Districts, Certified Local Districts and Architectural Surveys**”;**

OR

B. Select **National Register** from the menu on the right and click on the text that says “**Map of Historic Resources**” in the fourth paragraph.

2. Table of NR Nominations by County

The second resource, which is also on the SHPO website, is the table of Missouri’s NR nominations by county. From any SHPO webpage you can select **NR Nominations by County** from the menu on the right, and you will be taken to the “**Missouri National Register Listings**” page where you will see a table of all Missouri counties and St. Louis City. When you select one of these, you will reach a list of all NR nominations within that municipality. By clicking on a specific nomination, you will open a PDF file of the NR nomination exactly as it was submitted to NPS and approved by the Keeper of the National Register.

3. Other Resources

In the upper right area of the **NR Nominations by County** page you can select “**Certified Local Historic Districts**” (under “Related Content”) to get to a list of CLDs in Missouri.

Below the table of **NR Nominations by County** you will also find links to “Missouri Property Cover Documents, Multiple Resources Area, and Thematic Resources in Missouri.” More information about Multiple Property Documentation Forms (MPDFs), Multiple Resources Areas (MRAs), and Thematic Resources (TRs) will be explained in future issues of *Preservation Matters*.

In Our Next Issue:

During October, our National Park Service tax credit reviewers visited St. Louis, Kansas City, and a few cities and towns in between. In the December 2024 issue of *Preservation Matters* we will discuss highlights of their visit, along with highlights of the Novogradac 2024 Historic Tax Credit Conference and the 2024 Certified Local Government (CLG) Forum.

The goal of *Preservation Matters – The latest news from Missouri SHPO’s Architectural Preservation Services Team* is to increase communication and

transparency between SHPO's historic tax credit reviewers, the users of the program, and any other stakeholders or members of the public.

Comments? Questions? Suggestions? Please let us know! If there's anything you'd like to see covered, or any questions that we can explain, we will be happy to include those in a future issue of *Preservation Matters*.

To be added to or removed from the Architectural Preservation Services mailing list for this newsletter and other announcements, please send an email to Elizabeth.Hornbeck@dnr.mo.gov.

State Historic Preservation Office

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Architectural Preservation Services

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<https://mostateparks.com/historic-preservation-tax-credits>

